

Claims (US only)

1. Edible composition comprising at least 15 mg/kg of one or more coloured carotenoids and having a yellowness factor as defined in this specification of less than 4000, and have a yellowness index in the range of 1 to 90, the carotenoids being evenly distributed throughout the composition.
2. Edible composition according to claim 1, wherein the composition comprises at least 10 wt.% fat.
3. Edible composition according to claim 2, wherein the composition comprises at least 18 mg/kg carotenoids.
4. Edible composition according to claim 2, wherein the composition has yellowness index in the range of 1 to 75.
5. Edible composition according to claim 4, wherein the composition has a yellowness factor of less than 3333, preferably of less than 2850, and a yellowness index in the range of 1 to 65.
6. Edible composition according to claim 5, wherein at least 20 mg/kg carotenoids are present, and wherein the composition has a yellowness factor of less than 2850, and a yellowness index in the range of 1-70.
7. Edible composition according to claim 2, wherein at least 45 mg/kg carotenoids are present, and wherein the composition has a yellowness factor of less than 2000, and a yellowness index in the range of 1-90.

8. Edible composition according to claim 2, wherein the composition is an edible emulsion.
9. Edible composition according to claim 2, wherein the carotenoids are present in one or more carotenoids encapsulates.
10. Edible composition according to claim 9, wherein the carotenoids encapsulates are complex coacervates.
11. Edible composition according to claim 10, wherein the complex coacervates comprise gelatin and Arabic gum.
12. Edible composition according to claim 9, wherein the cartonoids encapsulates have a coating of at least one protein layer.
13. Edible composition according to claim 9, wherein the catonenoids encapsulates comprise at least 5-30 wt.% TiO_2 , based on the weight of the total cartenoids encapsulates.
14. Edible composition according to any of claims 9-13, wherein the edible composition is an edible emulsion.
15. Fat based food product comprising an edible composition according to claim 2.
16. Fat based food product according to claim 15, wherein the food product is selected from the group of shortenings, cooking fats, cheese, dressings, including mayonnaise, ice cream, milk type drinks, (drink)

yoghurt, toppings and fillings, butter, margarine and low fat margarine.

17. Fat based food product according to claim 16, wherein the food product is selected from the group of shortenings, cooking fats, butter, margarine and low fat margarine.
18. Fat based food product according to claim 17, wherein the food product comprises 15-25 mg/kg carotenoids selected from the group consisting of lutein, lycopene, alpha and beta carotene, or mixtures thereof.
19. Fat based food product according to claim 18 wherein the food product comprises 5-15 mg/kg of lutein , 1-8 mg/kg of lycopene, present as separate encapsulates or as encapsulates comprising both, and 3-8 mg/kg of a mixture of alpha and beta carotene in free form.
20. Encapsulates comprising carotenoids, characterised in that the carotenoids are encapsulated in complex coacervates of at least two polymers, and the encapsulates comprising 5-30 wt.% on particle weight, of titaniumdioxide.

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